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STATE OF CALIFORNIA Energy Resources Conservation and Development Commission

In the Matter of:)	
)	Docket No. 00-AFC-3
)	
Application for Certification)	
for the EM-One Power Station's)	INTERVENOR CBE'S
NUEVA AZALEA POWER PLANT PROJECT)	FIRST SET OF DATA
(Sunlaw Energy Corp.))	REQUESTS
)	

Intervenor Communities for a Better Environment ("CBE") hereby submits this set of Data Requests (numbers 1 – 103) pursuant to 20 Cal. Code Reg. § 1716(b). Any objections or statements of inability to comply with the request must be filed in writing with the Committee and with CBE within 10 days of receipt of this request. (20 Cal. Code Reg. § 1716(g).)

Dated: October 24, 2000
Anne E. Simon

Attorney for Intervenor Communities for a Better Environment

Technical Area: Air Quality

Background

The SCONOx and SCOSOx systems are presented in the AFC as the exclusive methods of air pollution control. Since unexpected maintenance or other problems with the SCONOx or SCOSOx system could affect compliance with air quality standards, information about back-up pollution control systems is needed.

Data Request

- 1. Please describe and document the three most likely scenarios of unexpected shutdowns or loss of capacity in each of the SCONOx and SCOSOx systems.
- 2. Please provide documentation showing the concentration difference(s) between the sulfur concentration in the fuel and the concentration after the SCOSOx system reduces the sulfur. If this differs for different initial fuel concentrations, please provide a table or other indication of the differences.
- 3. Please provide documentation showing at what concentration of sulfur in the fuel contamination of the catalyst occurs.
- 4. Please describe plans for air pollution control in the event of maintenance or other problems that would take the SCONOx and/or SCOSOx systems out of service for unexpected periods of time. Please include specifications for any equipment that will be installed for this purpose.

Background

In Table 5.2-19 in the Application for Certification, the Lowest Achievable Emissions Rate for PM_{10} for gas turbines of the type to be used in the project is presented as 143.7 tons per year for one turbine. In Table 5.2-23, the number of tons of PM_{10} for which offsets will be required is listed as 112 tons. The difference between the LAER numbers for PM_{10} and the offset numbers is not explained in the text.

- 5. Please provide documents showing the derivation of the LAER figures for PM_{10} in Table 5.2.19.
- 6. Please provide documents showing the derivation of the figure for PM_{10} emission offsets in Table 5.2-23.

- 7. Please describe the equipment and/or processes to be used in the power plant that will control PM_{10} emissions.
- 8. Please explain and provide calculations to demonstrate the difference between the LAER figures for PM_{10} in Table 5.2-19 and the PM_{10} emission offset figure in Table 5.2-23.
- 9. In a table, please list any and all pollution control technologies for the plant's PM_{10} sources that were considered by the applicant but were not included as part of the application. For each technology, state the potential amount of PM_{10} reduction and the reason(s) for not using it.

Background

The Response to the staff's first Data Request #80 states that a soil vapor extraction system has been installed at the site. Such systems typically emit toxic pollutants to the air. It is not clear whether these emissions are part of the analysis in the AFC.

Data Request

- 10. Please provide documentation showing the estimated duration of use of the soil vapor extraction system.
- 11. Please describe how the emissions from the soil vapor extraction system have been taken into account in the air pollution modeling for the project.

Background

The Response to the staff's Data Request #77 states that chlorides are found in the waste washing solution for the catalysts for the SCONOx and SCOSOx systems. Chlorine is a necessary element in the formation of dioxin in industrial combustion processes. Since dioxin is a highly toxic chemical, all possible pathways for its formation and/or emission should be accounted for.

- 12. Please list all steps of the power plant processes in which chlorine (whether elemental or in compounds) is or may be present, and the source(s) of the chlorine or chlorine compounds at each step.
- 13. Please describe any processes, equipment, or planning to eliminate or reduce the presence of chlorine in power plant processes.

- 14. Please provide all test data (including dates of testing, sampling and testing protocols, lab results, and calibration methods) for any tests for dioxin that have been performed at any of Sunlaw's Vernon facilities.
- 15. Please provide any studies, reports, test data, or other documents providing the results of any testing for dioxin of ambient air within a four-block radius of the proposed site.
- 16. Please provide all information, whether from tests at Sunlaw's Vernon facilities, or any other source, about the formation or possible formation of sulfur-substituted aromatic compounds when the proposed plant is in operation.

Background

The use of RECLAIM pollution trading credits is planned to provide the required offsets for the project. (AFC, pp. 5-24b - 5-24c.) The applicant's description of its efforts to acquire offsets without the use of trading credits, as well as the description of the status of the relevant pollution trading credits, are not complete.

- 17. Please state whether the Nueva Azalea Project will use NOx credits prior to 2003. If so, how many credits will be needed and where will these credits be obtained?
- 18. Please state whether any NO_x credits from Sunlaw's Vernon facilities would be available for the Nueva Azalea project prior to 2003.
- 19. For any NO_x credits from Sunlaw's Vernon facilities that would be available prior to 2003, please describe such credits, including their source and number of pounds.
- 20. How many tons of NOx credits will Sunlaw's Vernon facilities require from 2003 forward?
- 21. Please list the annual emissions of NO_x from Sunlaw's Vernon facilities for the years 1995-99.
- 22. Please list the annual emissions of PM_{10} from Sunlaw's Vernon facilities for the years 1995-99.
- 23. Please provide (in a table or other suitable format) a list, with addresses, of all stationary sources of PM_{10} emissions within a six-mile radius of the proposed project site. For each site, provide the annual emissions of PM_{10} and list all feasible control measures that could reduce PM_{10} emissions.

24. Please state how many tons of PM_{10} credits the applicant currently holds, including credits on which the applicant holds an option.

Background

The applicant proposes to trade VOC pollution credits at ratio of 3:1 for PM_{10} credits. (AFC, pp. 5-24b - 5-24c.) The applicant did not provide adequate information about the basis for this proposed trade.

Data Request

- 25. Please list and summarize any and all studies that show that VOCs are precursors to PM_{10} .
- 26. Please provide all documentation that supports applicant's "belief" that a 3:1 interpollutant trading ratio of VOCs for PM_{10} is appropriate. (*See* Response to First Set of Data Requests ("Response"), p. 13-1).
- 27. Please provide all documents, including documents from SCAQMD, used or generated in the development of the 3:1 ratio. (Response, p. 13-1).
- 28. Please provide the dates of all meetings between the applicant and SCAQMD staff regarding interpollutant trading of VOCs for PM_{10} , and summarize each meeting. (Response, p. 13-1).
- 29. Please provide all documents that were exchanged between the applicant and SCAQMD regarding interpollutant trading of VOCs for PM₁₀. (Response, p. 13-1).
- 30. Please state how many tons of VOC credits the applicant currently holds, including credits on which the applicant has an option.

Background

Estimates of PM_{10} emissions from the cooling tower are presented in Table 5.2-31 in the AFC. These emissions figures do not appear to be integrated into the other discussions in the AFC, making it difficult to ascertain the total picture for emissions of PM_{10} .

Data Request

31. Please provide documentation of the basis for the cooling tower PM_{10} emissions figures in AFC Table 5.2-31.

32. Please explain how the PM_{10} emissions from the cooling tower have been accounted for in the air modeling and in the calculation of emissions needing offsets.

Background

The AFC states that the applicant will be conducting a cumulative impacts analysis of air quality. (AFC, p. 5-24a). The AFC did not include a cumulative impact analysis.

Data Request

- 33. Please provide a cumulative impacts analysis of air quality for the area within a six-mile radius of the proposed site.
- 34. Please provide a table listing all proposed projects that are now under discussion by any governmental or private party including their addresses or cross-street locations, within a six-mile radius of the proposed site, that will be a source of any of the following pollutants: PM_{10} , CO, NO_2 , NO_2 and SO_2 . Include the estimated annual emissions of PM_{10} , CO, NO_2 , NO_2 and SO_2 for each site.
- 35. Please provide all air monitoring data within a six-mile radius of the proposed Nueva Azalea site collected by or at the direction of Sunlaw and/or any related entity in the last ten years regarding any of the following pollutants: PM_{10} , CO, NO_2 , NO_3 , and SO_2 .
- 36. Please explain why NOx and SO_2 , will not be considered in the applicant's proposed cumulative impacts analysis.
- 37. Please provide documentation justifying the 1:1 NOx offset ratio proposed in Table 5-2.23 of the AFC.

Background

The applicant has identified the elimination of the current J.B. Hunt truck storage area on the proposed site as a benefit of the project. Reasonably foreseeable future projects that involve truck traffic have not, however, been identified, nor does it appear that the applicant's analysis accounts for the trucks that J.B. Hunt has told the applicant that it intends to relocate in the vicinity of the project site. (Response, Attachment 49-1).

Data Request

- 38. Please list and provide documentation to describe all projects within a 6-block radius of the J.B. Hunt site that are now under discussion by any governmental or private party, which would involve more than one truck trip per day.
- 39. Please provide revised versions of all analyses and modeling in either the AFC or the Responses in which the removal of the J.B. Hunt trucks was assumed, to include the continued presence of J.B. Hunt trucks in the vicinity of the proposed project site.

Background

In Charles Lambert's presentation at the Initial Hearing on October 2, he used charts with a column that showed an amount of additional mass pollution, by pollutant, allowed by SCAQMD. These charts did not explain how these numbers were derived.

Data Request

40. Please provide a copy of Mr. Lambert's charts and explain for each pollutant listed the sources and derivations of the numbers for "additional pollution allowed" by SCAQMD.

Background

The applicant states that the use of meteorological data from only the year 1981 is sufficient to show regulatory compliance with SCAQMD rules. (Response, p. 9-1) This reliance on data that is 20 years old is confusing and potentially inconsistent with the applicant's other modeling methodologies and testing.

- 41. Please explain why using the meteorological data from only 1981 is acceptable and provide documentation from SCAQMD supporting the explanation.
- 42. Please identify each part of the AFC or the Responses in which data were gathered or analyzed, or modeling was reported, using meteorological data from a year other than 1981.

Technical Area: Alternatives

Background

The discussion of Alternatives in § 3.11 of the AFC is cursory. More information is needed in order both to evaluate possible real alternatives and to meet the legal requirements of the California Environmental Quality Act and the federal Clean Air Act.

- 43. Please provide a map on which the South Path 15 import constraint points (mentioned on p. 3-69 of the AFC) are clearly delineated.
- 44. Please provide a table, including address and principal cross streets, showing all possible sites for the power plant that were identified in the course of developing the Nueva Azalea project and preparing the AFC and, for each site, all the reasons that site was removed from consideration.
- 45. Please provide an explanation of the nature of "commercial terms" (AFC, p. 3-72) such that Site A was available on them, but Site D, essentially next door to Site A, was not.
 - 46. Please provide documentation of the ownership of Site D.
- 47. Please provide a map on which the "load restraints of Los Angeles" referred to in the discussion of Site C (AFC, p. 3-72) are clearly delineated.
 - 48. Please provide a map delineating the "load restraints" of Site C.
- 49. Please provide documentation regarding the existence, if any, of soil or ground-water contamination at Site C.
- 50. Please provide a copy of the business plan referred to in the discussion of Site C in the AFC (p. 3-72).
- 51. Please provide the documentation on which the following statement in the AFC is based: "Emissions from all existing commercially available and announced fuel reformers pollute 200% to 1000% more than a gas turbine with SCONOx." (AFC, p. 3-76c.)
- 52. Please provide an analysis of electricity conservation strategies as an alternative to the new generation capacity to be provided by the Nueva Azalea project.
- 53. Please explain how the possibility of having enough land to allow dry cooling technology to be utilized was factored in to the evaluation of possible sites for the project.
 - 54. Please provide the sources of the population data in Table 3.11-1 of the AFC.

Technical Area: Facility Description and Location

Background

The AFC states that the site has been utilized by J.B. Hunt. (AFC, p. 3-2). The AFC does not specify Sunlaw's ownership interest in the site.

Data Request

55. Provide documentation of the applicant's ownership interest in the site.

Background

The AFC states that the facility will require the construction of a new 16-inch gas pipeline that will be approximately 1.2 miles in length. (AFC, p. 3-14). In addition, an 18-inch pipeline of approximately 1000 feet will be built for reclaimed water. (AFC, p. 3-51). The AFC did not provide adequate information regarding the construction of these pipelines.

- 56. Please provide a map that shows the route of the proposed gas pipeline and of the reclaimed water pipeline more clearly than Fig. 3.2-1 in the AFC.
 - 57. Please provide a list of cities any part of which the new gas pipeline will traverse.
- 58. For each proposed pipeline, please provide a table showing the federal, state, and local laws, ordinances, regulations and standards for siting the pipeline.
- 59. Please state whether the applicant needs to enter into any franchise agreements for the construction of the proposed gas pipeline or the reclaimed water pipeline. If yes, please describe each agreement that needs to be completed.
- 60. Please describe the impacts of the construction of each pipeline, including the projected duration of construction for each pipeline.
- 61. Please provide a list of proposed mitigation measures for all identified pipeline construction projects.
- 62. Please provide documentation showing each agency responsible for any aspect of the approval, licensing, or construction of each pipeline.

Technical Area: Noise

Background

The AFC states (AFC, p. 5-236) that noise modeling was conducted for "normal, steady-state conditions." This modeling excluded noise from start-up, shutdown, the commissioning period, steam venting, and upsets, among other things. Since such conditions have a real impact on neighbors of an industrial facility, the noise impacts of the proposed project can not be fully evaluated without further information about them.

- 63. Please provide complete modeling, including the assumptions used, of the noise impacts of the proposed plant during its commissioning period.
- 64. Please provide complete modeling, including the assumptions used, of the noise impacts of the proposed plant during steam venting events.
- 65. Please provide complete modeling, including the assumptions used, of the noise impacts of the proposed plant during start-up and shut-down.
- 66. Please provide a list of possible upset events for the power plant, and provide complete modeling, including the assumptions used, of the noise impacts of the proposed plant during each such upset event.
- 67. Please provide complete modeling of both normal operations and each of the events requested in #63—66, above, at the nearest school location to the proposed plant site.

Technical Area: Public Health

Background

The area near the proposed project is densely populated and has a large number of both children and elderly residents. The AFC does not identify the full range of "sensitive receptors" that should be considered in the analysis.

Data Request

- 68. Please provide a list, with addresses, of all "sensitive receptors" in the area in a six-mile radius from the proposed site, including (but not limited to):
 - elementary schools
 - middle schools
 - high schools
 - nursing or convalescent homes
 - hospitals
 - public parks and outdoor recreation facilities
 - housing units designated for persons over the age of 55
 - public housing projects
- 69. Please provide a list, with addresses, of all schools currently planned to be built by 2005 within a six-mile radius of the proposed site.

Background

Since the area in which the project is proposed to be located is highly impacted by many sources of pollution and threats to human health, both CEQA and CEC regulations require that the impact of any additional sources be thoroughly analyzed.

Data Request

- 70. Please provide an analysis of the toxic effects of the projected NO_x emissions of the power plant.
- 71. Please provide an analysis of the electromagnetic field (EMF) impacts that would be associated with the project.

Background

The applicant claims that the maximum emissions of PM₁₀, NO₂, SO₂ and CO from the power plant "in areas surrounding the plant are very substantially lower than the exhaust emis-

sions from the existing diesel truck use of the site." (Response, p. 48-1). This statement is not supported by a quantitative analysis.

Data Requests

- 72. Please provide a map that clearly delineates the region referred to as "areas surrounding the plant" in the Response.
- 73. In a table for each pollutant, quantitatively compare the annual amount of emissions from the existing diesel truck use of the site and from the proposed power plant when it is fully operating. Please include all sources and assumptions in the derivation of the table entries.

Background

The applicant states that approximately 230 trucks from the J.B. Hunt facility will be relocated in the South Coast Air Basin. (Responses, p. 49-4).

Data Request

74. Please provide a table that quantifies the amount and type of emissions from these 230 trucks on annual basis.

Technical Area: Socioeconomics

Background

Attachment 51-1 to the Response to the staff's Data Request #51 provides a set of lists of household incomes in 1989 by income brackets. It is not possible to determine, by reading these lists, basic statistical information about household incomes and household locations.

Data Request

- 75. Please provide a table showing median household income by zip code for each zip code listed in Table 51-1.
- 76. Please provide a map or other key that matches the zip codes shown on Table 51-1 with geographic locations.

Background

The applicant has presented data, in both the AFC and Responses to Data Requests, based on the 1990 census. These figures in all likelihood do not reflect the current population of the area in a six-mile radius of the project, which if anything has a higher proportion of persons of color today than it did in 1990. The demographic data are therefore probably not representative of today's residents of the area.

Data Request

- 77. Please identify the sources of the population statistics presented in the Response to Data Request #51, Table 1.
- 78. Please provide your best estimate of the demographic distribution of the population within a six-mile radius of the proposed project site in 2000. Please provide the sources of each element that went in to creating this estimate.

Background

Concern was expressed by members of the public at the Initial Hearing about the effect of the construction and operation of the Nueva Azalea project on the values of small residential properties and small businesses. The AFC does not address this concern.

Data Request

79. Please identify all studies and reports that have investigated the impact of construction of a power plant on residential and small business property values. Please provide copies of each study or report.

Background

One of the benefits of the project identified by the applicant is the employment to be provided. (AFC, p. 1-18). The AFC does not, however, identify how much, if any, of the employment benefit will flow to persons living near the proposed site. It is therefore difficult to evaluate this assertion.

Data Request

- 80. Please provide a table that identifies each labor union local whose members are likely to work on the construction of the proposed project, including pipeline construction; how many members each local has; how many members of each local live in Los Angeles County; and how many members of each local live within a six-mile radius of the proposed project site.
- 81. The AFC states that there will be 25 permanent employees when the proposed plant is in operation (AFC, p. 1-13). Please provide a table showing the number of permanent jobs by classification and union or management status.
- 82. For each permanent on-site union job classification, please provide a table that identifies each labor union local whose members are likely to work in that job classification; how many members each local has; how many members of each local live in Los Angeles County; and how many members of each local live within a six-mile radius of the proposed project site.
- 83. Please identify the city and zip code of the projected off-site administrative location for the power plant, and the number of jobs and their classifications to be located at that site. (See AFC, p. 5-204a.)

Background

The AFC states that about \$900,000 per year will be generated in local purchases after the plant is in operation. (AFC, p. 5-207). No information is given as to how that figure was arrived at, making it difficult to evaluate that assertion.

Data Request

84. Please provide documentation supporting the assertion that there will be about \$900,000 per year in local purchasing related to the power plant when it is in operation. Please provide the estimated annual dollar amount of each type of purchase (*e.g.*, office supplies, employee lunches, etc.).

Background

The AFC states that about \$8.1 million will be generated in local purchases during the construction of the project. (AFC, p. 5-207). No information is given as to how that figure was arrived at, making it difficult to evaluate that assertion.

Data Request

85. Please provide documentation supporting the assertion that there will be about \$8.1 million in local purchasing related to the proposed power plant's construction. Please provide the estimated dollar amount of each type of purchase (*e.g.*, building hardware, asphalt).

Background

In the Response to Data Request #51, it is estimated that "close to \$3 million" per year in property taxes will be generated for the City of South Gate by the project. The basis for and details of this financial estimate are not provided, making it difficult to evaluate this assertion.

- 86. Please provide annual estimates of, and documentation for the basis of the estimate of, property taxes to be paid by the applicant for the project site property, in each of the years from 2001 through 2020.
- 87. Please provide documentation showing the amount of property tax paid on the J.B. Hunt site in fiscal year 1999.
- 88. Please provide documentation showing what proportion of the estimated property taxes for each year from 2001 through 2020 will be designated for the use of the South Gate Redevelopment Authority.

Background

The applicant states that the proposed power plant will enhance the socio-economic status of the people near its location (AFC p. 1-27), but does not provide any specific examples of such enhancements.

Data Request

89. Please list all contracts, commitments, promises and/or undertakings with any person and/or entity in or on behalf of any or all of the following cities: Bell, Bell Gardens, Commerce, Cudahy, Downey, Huntington Park, Maywood, Montebello, Norwalk, Pico Rivera, Santa Fe Springs, South El Monte, South Gate, Vernon and Whittier, regarding whether the Nueva Azalea power plant, if it is built, will make available below market rate electricity in these communities.

Technical Area: Waste Management

Background

The Response to the staff's first Data Request #79 states that J.B. Hunt's consultant finished the additional site characterization in July. The full characterization of the site is important to evaluating possible risks to residents and workers in the area.

Data Request

90. Please provide a copy of the additional site characterization study.

Background

The Response to the staff's Data Request #77 identifies reformer catalyst as one of the equipment elements that requires periodic washing. The role of the reformer and nature of the catalyst are not spelled out.

Date Request

91. Please provide a description of the reformer process and the composition of the reformer catalyst.

Background

The Response to the staff's Data Request #80 states that a soil vapor extraction system has been installed at the site as part of remediation activities. The effectiveness of the remediation program will affect both new construction and possible risks to residents and workers in the area.

- 92. Please list the pollutants in the soil that the soil vapor extraction system is expected to remediate.
- 93. Please describe and document the criteria that will be used to determine that the soil clean-up is complete.
- 94. Please identify the person(s) responsible for the on-site management of the soil vapor extraction system, giving their names, employers, and job titles.

95. Please identify the person(s) and/or entit(ies) that are financially responsible for the installation, maintenance, and/or control of the soil vapor extraction system.

Background

The Response to the staff's Data Request #77 provides information about the composition of the waste solution after the catalysts involved in the SCONOx and SCOSOx processes have been washed. No non-metal toxics (*e.g.*, benzene) are described. If these processes also remove toxics present in diesel exhaust from the air passing through the power plant systems (as the applicant has stated), it is necessary to account for these toxics in the waste stream.

- 96. Please describe how the SCONOx and/or SCOSOx systems will remove toxics present in diesel exhaust from air used in the power plant's processes prior to its release from the plant's stacks.
- 97. Please estimate, and provide documents supporting the estimate, the percentage of toxics present in diesel exhaust in air used in the power plant's processes that will be removed prior to its release from the plant's stacks.
- 98. Please present a table with quantitative estimates of the concentrations of each toxic constituent of diesel exhaust in the air used in the plant's processes, both before and after the asserted removal of such toxics from the air.
- 99. Please present a table with quantitative estimates of the total mass, on an annual basis, of each toxic constituent of diesel exhaust in the air used in the plant's processes, both before and after the asserted removal of such toxics from the air.
- 100. Please present a table with quantitative estimates of the concentrations and annual mass amounts of each toxic constituent of diesel exhaust that will be present in the waste catalyst washing solution.

Technical Area: Water Resources

Background

The AFC states that SCONOx regeneration wastewater will be reused as supplemental makeup to the cooling tower. (AFC, p. 5-141). Since several tons a year of PM_{10} will be emitted from the cooling tower (AFC, Table 5.2-31, the chemical composition of the water is relevant in evaluating the impacts of cooling tower emissions.

- 101. Please describe the process by which wastewater is generated in the SCONOx regeneration process.
- 102. Please provide a table showing the chemical composition of SCONOx regeneration wastewater and the concentrations of each chemical listed.
- 103. Please provide documentation showing what proportion of the cooling tower PM_{10} emissions are the result of dissolved solids in the reclaimed water proposed to used in the project.